Remarks

Claims 1-10 remain pending in the application. By this Amendment, claim 1 has been amended. No new matter is believed added.

In the Office Action, claim 1 is objected to because of an informality. By this Amendment, claim 1 has been revised. Accordingly, Applicants respectfully request withdrawal of the objection.

In the Office Action, claims 1-10 are rejected under 35 USC 103(a) over Buford et al. (PCT/US97/04574, International Publication No. WO97/34240), hereinafter "Buford", in view of North et al., (SAMS Teach Yourself XML in 21 Days, Sam's Publishing, Indianapolis, IN, 1999), hereinafter "North".

With regard to independent claims 1, 3, 5-6 and 9-10, Applicants respectfully submit that the suggested combination of the cited prior references fails to teach or suggest each and every claimed feature. For instance, claim 1 recites "providing a table derived from said schema, said table containing identification information for solely identifying each description element in a hierarchical level, and structural information for retrieving any child description element from its parent description element[.]" (Similarly claimed in claims 3, 5-6 and 9-10). The Office alleges that the combination of Buford and North suggests this feature. Applicants respectfully disagree because the suggested combination of Buford and North does not include "said table containing identification information ... and structural information[.]" (Claim 1).

North discloses XML DTD as a schema to describe information models. (North at page 105). Buford discloses "a DTD file 28 that defines the syntactical elements used to convert the document 25 into a compact tree (CT) representation." (Page 9, lines 13-

14). As such, even if North and Buford are combined, the combination only suggests a XML DTD as a schema to describe information models or to define syntactical elements used to convert the document 25 into a compact tree (CT) representation. However, the combined XML DTD does not contain, *inter alia*, structural information, as included in the claimed invention. Rather, the parse tree 41 or child table 164 of the CT instance object 32 of Buford contain the hierarchical structure. (*See* FIGS. 1 and 5, and page 16, line 8 of Buford.) However, the said parse tree 41 or child table 164 do not contain "identification information for solely identifying each description element in a hierarchical level[.]" (Claim 1 of the claimed invention). In view of the foregoing, the suggested combination does not disclose or suggest "providing a table derived from said schema, said table containing identification information for solely identifying each description element in a hierarchical level, and structural information for retrieving any child description element from its parent description element[.]" (Claim 1).

With further regard to claims 1, 3, 5-6 and 9-10, the suggested combination does not disclose or suggest "encoding said description element to be encoded as a fragment comprising said content and a sequence of the retrieved identification information." (Claim 1; similarly claimed in claims 3, 5-6 and 9-10). In Buford, the CT instance object 32 still contains tables (*see* FIG. 5), which means that the CT instance object 32 includes syntactical elements. Buford does not encode the CT instance object into raw binary data in, e.g., storage cells. As such, Buford does not disclose or suggest a fragment comprising the content and a sequence of the retrieved identification information, which are by definition binary data sequences. Instead, Buford stores and transmits directly the CT instance object 32 including the tables. (*See*, e.g., FIG. 1 of Buford.) In contrast, the

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claimed invention encodes the description element as a fragment comprising the content and a sequence of the retrieved identification information. (*See* FIGS. 4-6 of the claimed invention for illustration.) North does not overcome this deficiency of Buford.

In addition, with respect to claims 1 and 5, Buford and North do not disclose or suggest "scanning a hierarchical memory representation of said instance from parent description elements to child description elements until reaching the description element to be encoded[.]" (Claim 1; similarly claimed in claim 5). In Buford, the CT instance object 32 is stored and transmitted directly so that Buford does not scan the tables in the CT instance object 32 to obtain a description element. North does not overcome this deficiency of Buford.

Moreover, with respect to claims 3 and 6, Buford and North do not disclose or suggest "searching in said table for the description element associated to the current identification information and adding said description element to a hierarchical memory representation of an instance of said schema[.]" As Buford transmits the CT instance object 32 directly, Buford does not disclose adding description element to a hierarchical memory representation because all the information is already in the CT instance object 32 that is stored and transmitted in Buford. North does not overcome this deficiency of Buford.
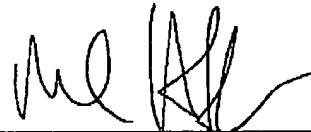
In view of the foregoing, the Office fails to establish a *prima facie* case of obviousness. Accordingly Applicants respectfully request withdrawal of the rejection.

The dependent claims are believed allowable for the same reasons stated above, as well as for their own additional features.

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Applicants respectfully submit that the application is in condition for allowance.

If the Examiner believes that anything further is necessary to place the application in

condition for allowance, the Examiner is requested to contact Applicants' undersigned

representative at the telephone number listed below.

Respectfully submitted,

Dated: 3/9/06

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